

What is claimed is:

BEST AVAILABLE COPY

1. An agricultural machine having at least one crop processing work unit, a plurality of crop transport units operatively assembled as a straw walker step, wherein the crop transport units convey crop streams in opposite directions and are spaced apart to define a crop through-gap, and a cleaning device having a forced-draught fan before the cleaning device, further comprising:
- an exhaust fan located after the cleaning device, wherein the transport units are located between the forced-draught fan and the exhaust fan and the forced-draught fan produces an air stream which is directed from the forced-draught fan to the exhaust fan, thereby improving a cleaning process in the straw walker through-gap of the straw walker step.
2. The agricultural machine according to claim 1, wherein the exhaust fan is constructed as a crop comminutor.
3. The agricultural machine according to claim 1, wherein the forced-draught fan and exhaust fan generate air stream speed, which is adjustable by an adjusting means.
4. The agricultural machine according to claim 3, wherein the air stream speed is determined as a function of one of the factors selected from the group of crop type, crop throughput or moisture content in the crop.
5. The agricultural machine according to claim 3, wherein the air stream speed is adjusted by varying a rotational speed of the exhaust fan.
6. The agricultural machine according to claim 3, further including: at least one air speed measuring device for measuring an air speed, located between the crop transport units; and

10027019-122001

BEST AVAILABLE COPY

14/17

a control and regulating device for receiving the air speed from the at least, one air speed measuring device and regulating the air speed.

7. The agricultural machine according to claim 6, wherein the control and regulating device is programmed with a preset target speed value, compares the air speed to the preset target speed value and sends an output speed change value to the exhaust fan to adjust the exhaust fan's rotational speed, thereby adjusting the speed of the air stream to equal the preset target speed value.

8. The agricultural machine according to claim 7, wherein the preset target speed value is a function of crop type.

9. The agricultural machine according to claim 7, wherein the preset target speed value is defined as a function of crop moisture.

10. The agricultural machine according to claim 1, wherein the exhaust fan is a crop distributing device.

11. An agricultural machine having at least one crop processing work unit and an exhaust fan for carrying away a portion of crop, which is processed by working members of the agricultural machine, comprising:

a crop distributing device operatively connected to the exhaust fan, having guide webs that are variable in position;

a first working position for receiving a first of the crop streams and a second of the crop streams and

a second working position for receiving one of the crop streams, wherein in the first working position, the first and the second crop streams are combined and discharged for broadcasting as a common crop stream, and in the second working position, the first of the crop streams is received and discharged and the second of the crop streams is conveyed and

BEST AVAILABLE COPY
15/17

discharged from the working members in swath form, separate from the first of the crop streams.

12. The agricultural machine according to claim 11, wherein the first of
5 the crop streams being discharged is substantially chaff and short straw.

13. The agricultural machine according to claim 11, wherein the second of the crop streams being discharged is substantially long straw.

10 14. The agricultural machine according to claim 11, wherein the crop distributing device operated in the second working position and the crop streams are staggered and do not affect each other during discharge.

15 15. The agricultural machine according to claim 11, wherein the guide webs are shifted to a side deposition working position, thereby discharging crop transverse to a direction of travel.

16. The agricultural machine according to claim 11, further including:
a crop guide element removably mounted over the exhaust fan for
20 precluding or allowing the second crop stream from entering the exhaust fan;
a plurality of crop guide channels operatively attached to and for
controlling locations of the guide webs, wherein the crop guide elements open and
close allowing or precluding the flow of the crop streams and one of the crop
guide channels closes and displaces the crop stream transverse to a direction of
25 travel.

17. The agricultural machine according to claim 16, wherein the guide webs are divided into a first group and a second group and the first group and the second group are placed in a side deposition working position, closing one of the
30 crop guide channels.

18. The agricultural machine according to claim 16, wherein one of the crop guide channels is centrally arranged in the crop distributing device, in a closed position.

5

19. The agricultural machine according to claim 18, wherein one of the crop guide channels pivots between an engaged position and an unengaged position.

10

20. The agricultural machine according to claim 16, wherein the crop distributing device has three crop guide channels, which are adjustable from a first crop discharge direction, pointing essentially in a direction opposite the direction of travel, to a second crop discharge direction, pointing transverse to the direction of travel.

15

21. The agricultural machine according to claim 16, wherein the crop guide webs are substantially straight.

22. The agricultural machine according to claim 16, further including a common coupling mechanism for varying positions of the guide webs.

20

23. The agricultural machine according to claim 16, wherein the crop guide webs are arcuate.